



# India: Opportunities in an Emerging Space Journey

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# The European Space Policy Institute (ESPI)

## Mission Statement of ESPI

The European Space Policy Institute (ESPI) provides decision-makers with an informed view on mid- to long-term issues relevant to Europe's space activities. In this context, ESPI acts as an independent platform for developing positions and strategies.



ESPI  
Reports



Position Papers  
and Executive  
Briefs



Information  
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Studies in  
Space Policy



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Conferences



# ESPI Research Activities: India in Space (2016-2018)

## Rationales

- India: a mature spacefaring nation... with relevant assets... and great potential
- Acceleration and diversification of its space programme
- 2016 EU-India summit: need to give new momentum to the partnership

## Major activities

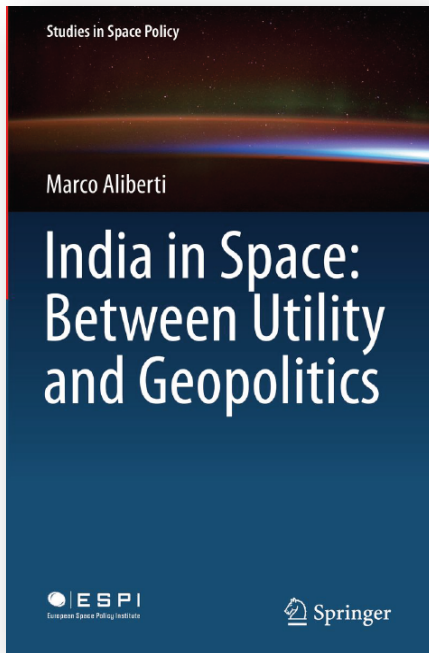
- 2017 ESPI Workshop “India in Space – The forward look to international Cooperation”
- 2017 and 2018: ORF Space Policy Dialogue
- Research outputs:
  - Revitalising EU-India Strategic Partnership: the Role of Space > ORF
  - Understanding India’s New Space Potential: Prospects for Europe > IAC
  - India in Space: Between Utility and Geopolitics > Springer Book



ORF KALPANA CHAWLA  
ANNUAL SPACE POLICY DIALOGUE



# ESPI Studies in Space Policy: India in Space



Publisher: Springer  
Release: February 2018

## Project objectives:

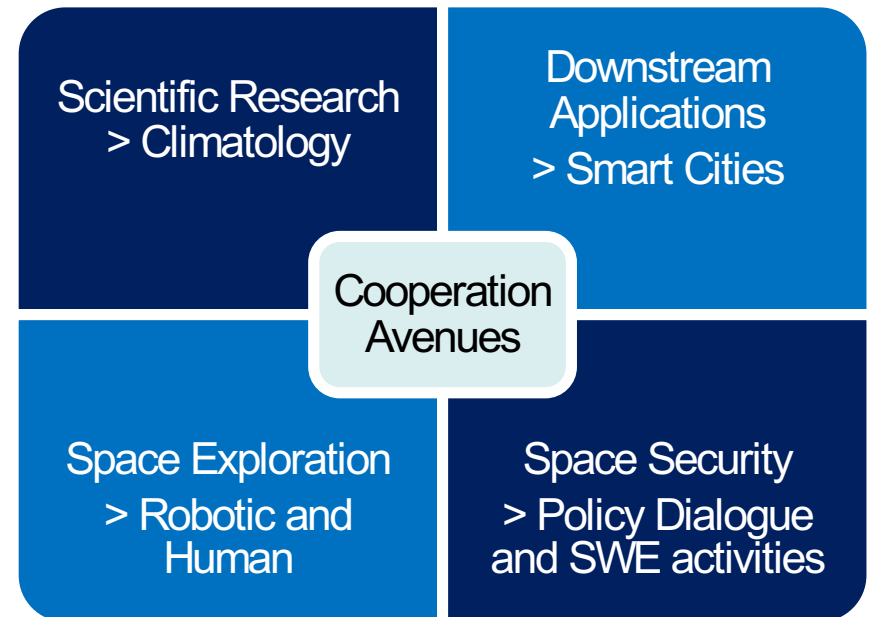
- Investigate thoroughly historical, current and possible future developments of Indian space activities in relation with Indian socio-economic and geopolitical evolutions
- Outline “the India Opportunity” and identify new avenues for mutually beneficial Europe-India cooperation

## Main topics covered:

- Historical evolution of the Indian space programme
- Current landscape for space activities
- Space in India’s socio-economic development
  - Space for societal empowerment
  - Space for economic growth
- Space in India’s changing geopolitics
  - Space for diplomacy & Diplomacy for space
  - Space for security & Security of space
- India’s future path in space
- Assessment of Europe-India (space) relations
- Seizing the India opportunity – Main lines of cooperation

## Key findings: India-Europe Cooperation Potential

- Diversification of the Indian space programme offers a plethora of opportunities for Europe:
  - Policy Dialogue, Exchange of Data, Joint Activities
  - G2G, B2B, B2C
- At European Level, India's cooperation potential
  - Sized by CNES and EUMETSAT
  - Largely unleveraged at EU and ESA level
  - Hurdles still persist
- Future Cooperation Avenues
  - Multiple stakeholders (National/European, Public/Commercial)
  - Multiple drivers (Political, Programmatic, Business)



# ESPI Follow-up Activity: Roadmaps for Europe-India Space Engagement

## Overarching objective:

- Provide a comprehensive framework for creating roadmaps between stakeholders on both sides for active engagement.
- Study itself as catalyst in drawing stakeholders on both the sides to seize potential win-win avenues.

## Assess current state and define roadmaps for:

- G2G engagement between EU (including MS) and India.
- Research and Academic engagement between EU and Indian stakeholders
- B2B and B2C engagement in both the upstream and downstream



### Special emphasis on Industry engagement

- Mapping Europe-India space economy
  - All verticals covered
- Policy and Regulations (FDI, IPR, Tax ...)



## Areas to be covered:

- Launch industry
- Satellite manufacturing
- Earth Observation
- Sat Communications (IFC, DTH, broadband, internet...)
- Geospatial and Navigation

## ESPI Follow-up Activity: Partners and Timeline



Findings presented at:

*5° ORF Kalpana Chawla  
Annual Space Policy Dialogue*

February 2019



**DUA ASSOCIATES**

# Panel Discussion

## India Participants

- ❑ S. Somanath, *Director, Vikram Sarabhai Space Centre, ISRO*
- ❑ Rakesh Sasibhushan, *Chairman-cum-Managing Director, Antrix Corp*
- ❑ Madhavan Nair Sivasankar, *Secretary to Government of Kerala*
- ❑ Rohan Ganapathy, *CEO, Bellatrix Aerospace*
- ❑ Subba Rao, *CEO, Ananth Technologies*

## Europe Participants

- ❑ Isabelle Sourbes-Verger, *Senior Researcher, CNRS*
- ❑ Bruno Naulais, *ESA BICs Network Manager, ESA/ESTEC*
- ❑ Thomas Fouquet, *Advisor, Director of Innovation, CNES*
- ❑ Linda Tomasini, *International Relations Advisor, CNES*





*Thank you for your attention!*

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